

IN THE CLAIMS

Please Amend the claims as follows:

1. (Currently amended) A display device for displaying a three dimensional image such that different views are displayed according to different viewing angles, the display device including:

a display panel having a plurality of separately addressable pixels for displaying said image, the pixels being grouped into a plurality of groups with each group including a plurality of pixels, each pixel in the ~~such that different pixels in a~~ group corresponding to one of a plurality of different views of the image as a function of an angle with respect to a first axis;

a display driver for controlling an optical characteristic of each pixel to generate an image according to received image data; and

a colour compensation device for further controlling light transmission characteristics of ~~at least some~~ a plurality of pixels within a group to compensate for a predetermined viewing angle dependency of said optical characteristic in a second axis of the display panel, wherein the second axis is transverse to the first axis, wherein a correction applied to each of the plurality of pixels within the group is different.

2. (Previously Presented) The display device of claim 1 further including a back panel for providing a plurality of discrete sources of illumination, each group of pixels in the display panel being positioned to receive light from a respective one of the discrete sources of illumination.

3. (Previously Presented) The display device of claim 2 in which the back panel provides a plurality of line sources of illumination.

4. (Previously Presented) The display device of claim 2 in which the back panel provides a plurality of point sources of illumination.

5. (Previously Presented) The display device of claim 2 in which the display panel is a light-transmissive display panel adapted for viewing from a side opposite to a side on which the back panel is located.
6. (Previously Presented) The display device of claim 1 further including a lenticular array positioned adjacent to the display panel, each lenticle within the lenticular array focusing light from selected pixels in the display panel.
7. (Previously Presented) The display device of claim 6 in which each lenticle within the lenticular array is associated with a group of pixels.
8. (Previously Presented) The display device of claim 1 in which the display driver and colour compensation device in combination are adapted to control the amount of light passing through each pixel according to a three dimensional colour image to be displayed.
9. (Previously Presented) The display device of claim 1 in which the colour compensation device comprises a look-up table containing correction values to be applied in respect of each pixel within a group.
10. (Previously Presented) The display device of claim 9 in which the correction values are selected according to a viewing angle of a respective pixel within a group.
11. (Previously Presented) The display device of claim 10 in which the correction values are selected so as to substantially normalise an intensity of colour and/or its colour point in the colour triangle as displayed by a group of pixels to be independent of viewing angle.
12. (Original) The display device of claim 9 in which the look-up table includes substitution values or offset values as a function of viewing angle to be applied to a frame store.

13. (Previously Presented) The display device of claim 1 in which the colour compensation device is adapted to adjust a pixel drive voltage received from the display driver.

14. (Previously Presented) The display device of claim 1 in which the display panel includes colour clusters for each physical location within the image, a colour cluster comprising a plurality of pixel groups each corresponding to a different primary colour, the colour compensation device adapted to control an optical characteristic of each pixel within a pixel group and each group within a cluster so as to produce an image colour for each colour cluster that is independent of viewing direction.

15. (Currently Amended) The display device of claim 1 in which inherent optical characteristics of the display panel are configured such that viewing angle dependence is reduced or substantially ~~minimised~~ minimized relative to the first axis which is a y-axis.

16. (Currently amended) The display device of claim 15 in which the colour compensation device serves to reduce or substantially ~~minimise~~ minimize viewing angle dependence relative to the second axis which is a x-axis, wherein the second axis is orthogonal to the y-axis.

17. (Original) The display device of claim 16 incorporated into an object, in which the x-axis is defined as the horizontal axis when the object is in normal use, and the y-axis is defined as the vertical axis when the object is in normal use.

18. (Currently amended) A method for displaying a three dimensional image on a display device such that different views of the image are displayed according to different viewing angles, the method comprising the steps of:

processing image data to form pixel data values for each one of a plurality of separately addressable pixels in a display panel, the pixels being grouped into a plurality of groups with each group including a plurality of pixels, each pixel in the ~~such that~~

~~different pixels in a~~ group corresponding to one of a plurality of different views of the image as a function of an angle with respect to a first axis, the pixel data values each for controlling light transmission characteristics of a respective pixel to generate an image;

applying colour correction values to ~~at least some~~ a plurality of pixel data values within each group to compensate for a predetermined viewing angle dependency of an optical characteristic in a second axis of the display panel, wherein the second axis is transverse to the first axis, by controlling an amount of light passing through each pixel according to a three dimensional colour image to be displayed, wherein the colour correction values applied to each of the plurality of pixels within the group are different;
and

using said corrected pixel data values to drive pixels of a display panel to generate said image.

19. (Cancelled).

20. (Original) The method of claim 18 in which the colour correction values are obtained from a look-up table containing correction values to be applied in respect of each pixel within a group.

21. (Previously Presented) The method of claim 20 in which the colour correction values are selected according to a viewing angle of a respective pixel within a group.

22. (Previously Presented) The method of claim 18 in which the colour correction values are selected so as to substantially normalise a colour and/or its colour point in a colour triangle as displayed by a group of pixels to be independent of the viewing angle.

23. (Original) The method of claim 18 in which the colour correction values are derived from a transmission versus voltage characteristic of the display panel, the corrected pixel data values being used to adjust a pixel drive voltage applied to the display panel.

24. (Previously Presented) The method of claim 18 in which the pixels are configured in colour clusters for each physical location within the image, a colour cluster comprising a plurality of pixel groups each corresponding to a different primary colour, the colour correction values being adapted to control an optical characteristic of each pixel within a pixel group and each group within a cluster so as to produce an image colour for each colour cluster that is independent of viewing direction.

25. (Currently Amended) The method of claim 18 further including the step of configuring inherent optical characteristics of the display panel such that viewing angle dependence is reduced or substantially ~~minimised~~ minimized relative to the first axis which is a y-axis.

26. (Currently Amended) The method of claim 25 in which the colour correction values are applied to reduce or substantially ~~minimise~~ minimize viewing angle dependence relative to the second axis which is a x-axis, wherein the second axis is orthogonal to the y-axis.

27. (Original) The method of claim 26 in which the x-axis is the horizontal axis when the display panel is in normal use, and the y-axis is the vertical axis when the display panel is in normal use.

28. (Previously Presented) A computer program product, comprising a storage medium having thereon computer program code that is executable when loaded onto a computer, comprising:

instructing the computer to execute the method of claim 18.

29. (Cancelled).